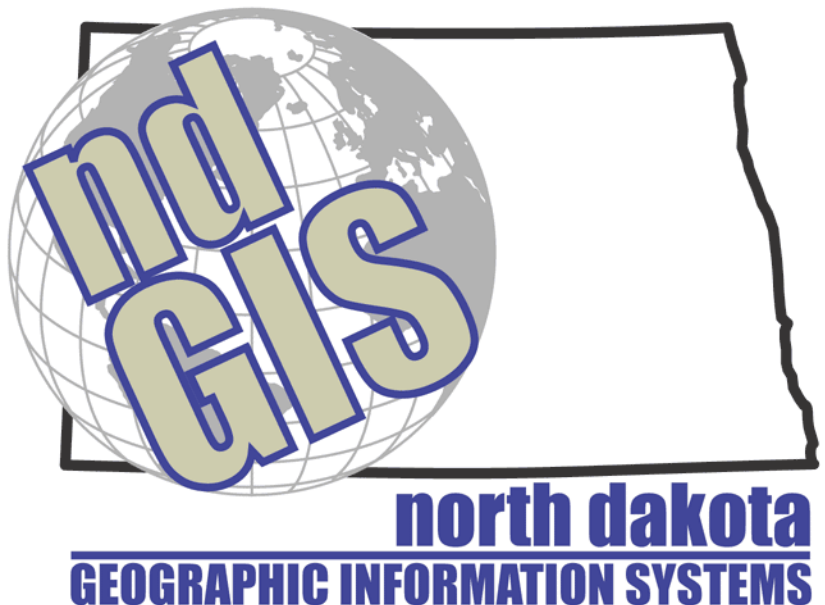




North Dakota Full GIS Technical Committee Meeting

October 15, 2008

*Bob Nutsch
GIS Coordinator
State of North Dakota*





*Introductions:
Name, title, who you work for*



Agenda

- ✚ Executive Committee Report
- ✚ Lightning Reports
- ✚ Feedback & Discussion
- ✚ Break
- ✚ Pictometry Presentation



Executive Committee Report

Background

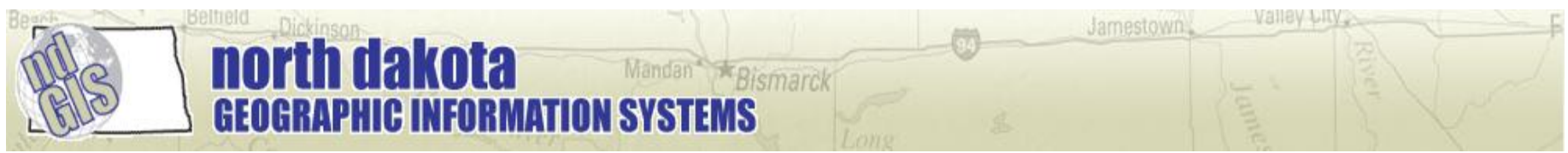
✚ Last meeting September 11, 2007

✚ Minutes:

<http://www.nd.gov/gis/about/gistechfull/minutes/09112007minutes.html>

✚ Executive Order 2001-06 specified:

- Executive GISTC – 7 agencies
- Full GISTC – state agencies, local federal agencies, business community



Executive GISTC Membership

- ⊗ State Water Commission – Rod Bassler
- ⊗ Dept. of Health – Ann Fritz
- ⊗ Dept. of Transportation – Brian Bieber
- ⊗ Game and Fish – Brian Hosek
- ⊗ Geological Survey – Elroy Kadrmas
- ⊗ Parks and Recreation – Chris Dirk
- ⊗ Information Tech. Dept. – Bob Nutsch
- ⊗ Land Department* - Levi Erdmann
- ⊗ Public Service Commission* – Steve Kahl
- ⊗ Oil & Gas Division* – Nathan Kirby

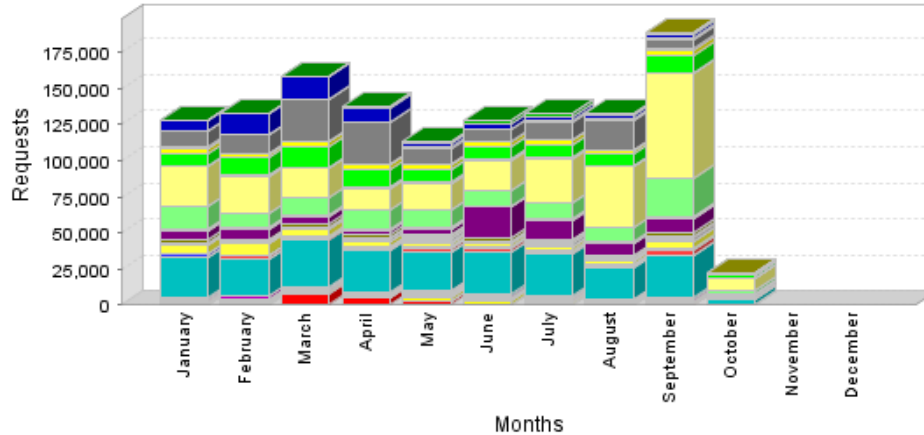
*Associate Members

Accomplishments – GIS Hub Usage

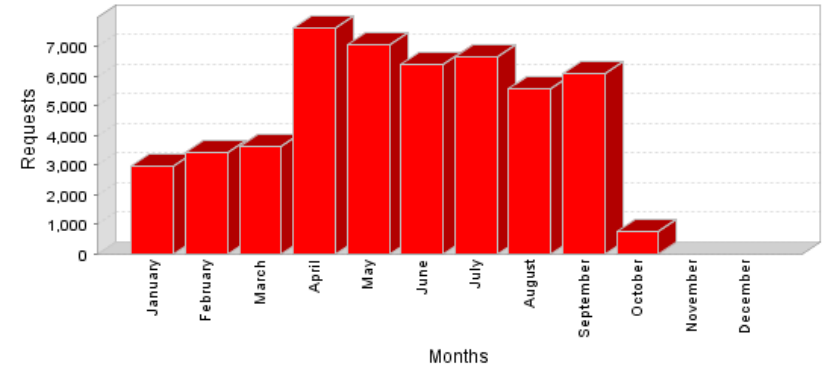
- Database: A little over 3TB
- Data downloads: Over 46,000 during 2007 (32,000 in 2006)
- Database: 40+ daily concurrent connections from state agency users
- Web applications: Over 1.4 million hits during 2007 (1 million in 2006)

Web Services (2008)

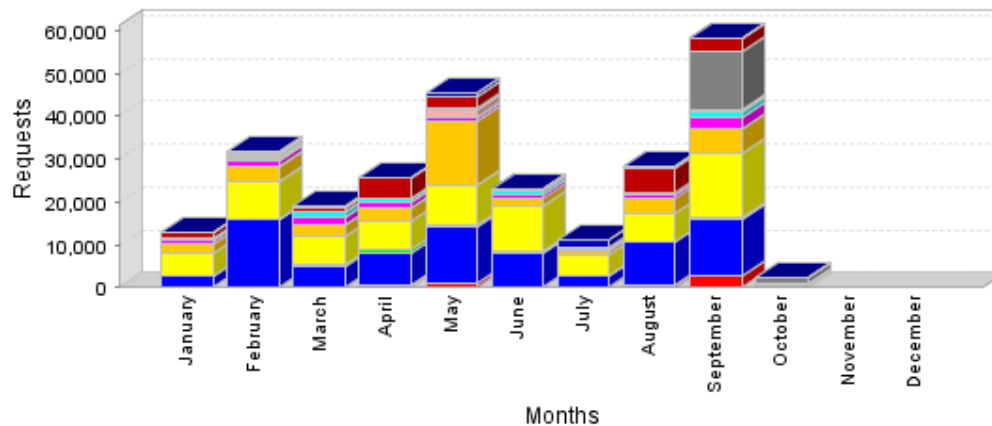
Requests per Month - Image Server



Requests per Month - Metadata Server



Requests per Month - Feature Server

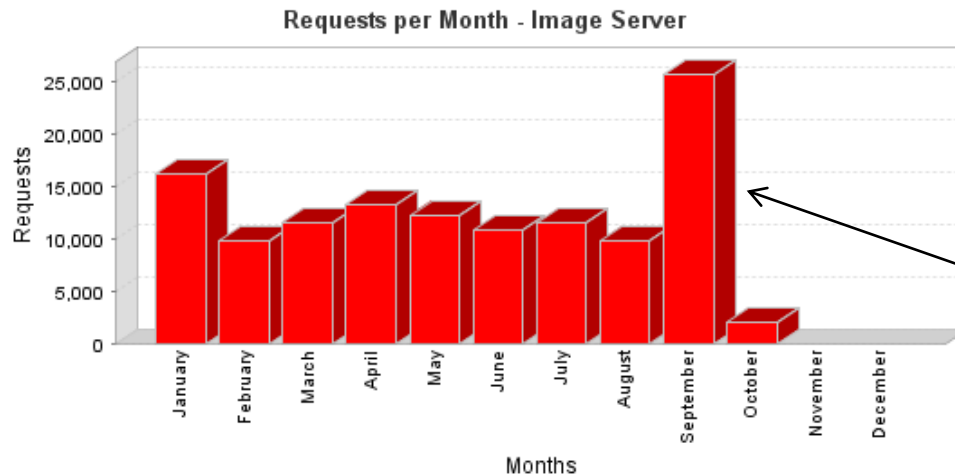




Web Services – General Info

- ✚ ESRI-format and OGC-format
- ✚ Image services – raster data, turn layers on/off
- ✚ Feature services – vector data, turn layers on/off, set the symbology
- ✚ ArcMap can use this data
- ✚ See <http://www.nd.gov/gis/mapsdata/web/> for more information

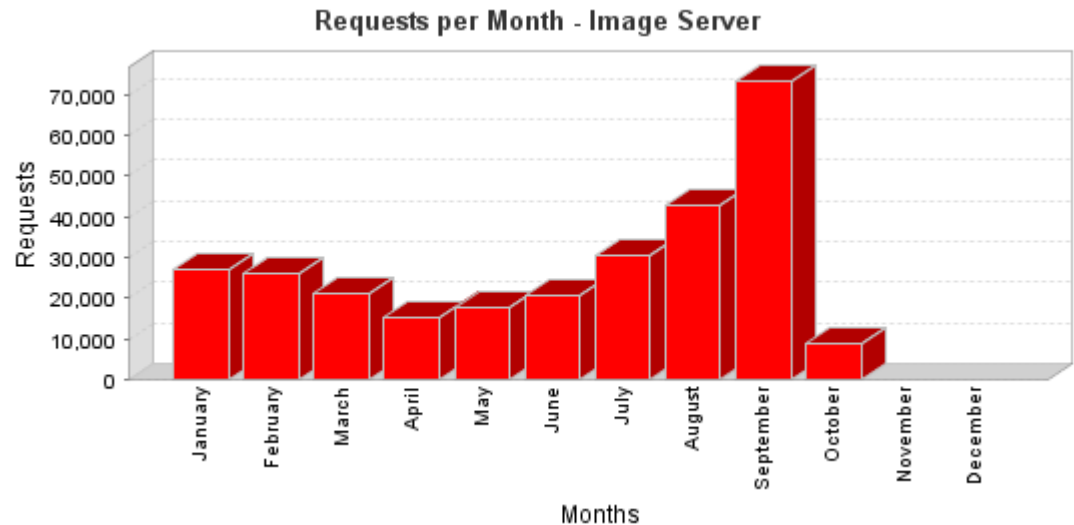
Specific Web Services (2008)



OGC-WMS

Dept. of Emergency
Services exercise

Game & Fish



Accomplishments – General

- ✚ GIS integrated into the 2008-10 IT Professional Services Contract Pool
 - ✚ Previously a separate section
 - ✚ Three categories filled by multiple vendors
 - ✚ Work order system to speed things up
 - ✚ **Local government can use!**
 - ✚ <http://www.nd.gov/gis/resources/pool>



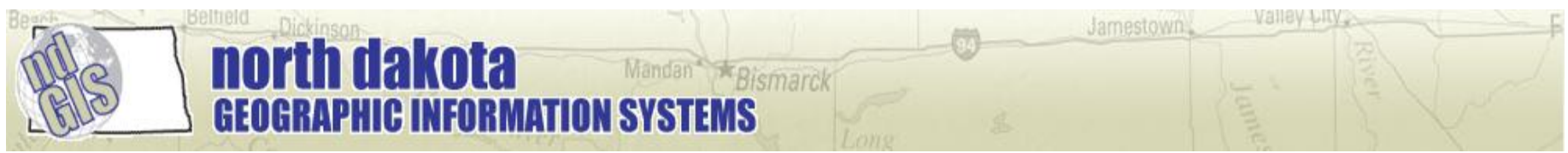
Accomplishments – General

✚ Road Centerline Validation Study

- ✚ Concept from 9-1-1 Association GIS Committee
- ✚ Update results from previous study
- ✚ Determine cost estimate for roads & address points
- ✚ Thanks to all who assisted with data!
- ✚ <http://www.nd.gov/gis/news/emservicesdata.html>

Accomplishments – General

- ✚ Grant from the USGS to enhance Hub's data distribution
- ✚ Collection of critical infrastructure data completed (first updates late this year)
 - ▣ Thanks to all those who assisted
- ✚ Updated Strategic Plan



Accomplishments – New & Updated Data

- ❖ Snowmobile trails
- ❖ Airports, airport runways
- ❖ Aquifers – compilation underway
- ❖ Hydrologic unit boundaries – submitted for national certification
- ❖ Railroad data – merging of NDDOT & federal sources
- ❖ Other data – roads, communications, water
- ❖ For listings of updated data visit
<http://www.nd.gov/gis/mapsdata/data/datainfo>

Current Work

- ✚ New storage – up to 16TB
- ✚ Data:
 - ✚ NAIP – attempt partner funding
 - ✚ Railroad – further refinement
 - ✚ Aerial imagery – Bismarck/Mandan assistance, load other city & county
 - ✚ Complete state-wide 10m DEMs coverage

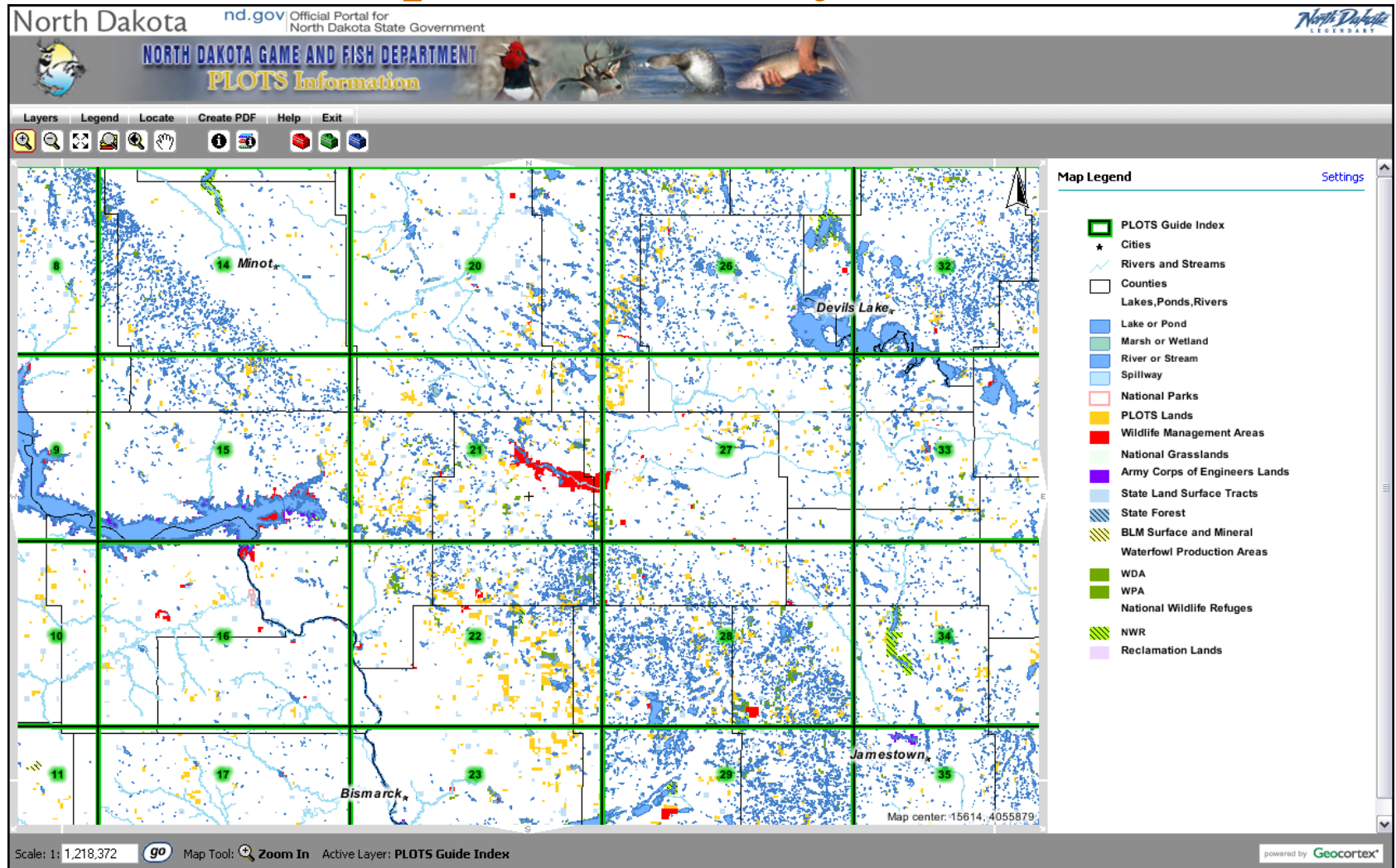
Current Work – NAIP Aerial Photos

- ✚ National Agriculture Imagery Program
- ✚ 2006 was the last year for collection
- ✚ 2009 1-meter is planned, but non-farmland areas are not covered, about 5200 acres
- ✚ Unless...North Dakota can come up with some matching funds, about \$115k
- ✚ All contributions are welcome!
- ✚ Contact Bob ASAP if able to contribute

Current Work – Infrastructure

- ✚ New Hub Explorer interface
 - ▣ Offers rich functionality
 - ▣ Will have updated data download, vector and raster
 - ▣ Announced via NDGIS listserv when it's available with information on the web site

New Hub Explorer Interface



New Hub Explorer Interface

North Dakota nd.gov Official Portal for North Dakota State Government

North Dakota Hub Explorer
General Information

Layers Legend Locate Selection Key Map Bookmarks Save Image Extract Data Create PDF Advanced Help Exit

Map center: 47°29' N, 100°17' W

Scale: 1: 2,562,712 [go](#) Map Tool: [Zoom In](#) Active Layer: Legislative District

Cursor Location: North Dakota State Plane South (feet): 2197966, 838517 UTM 14N: 457931, 5312228 Geographic (NAD83): 47° 57.71847' N, 99° 33.81324' W

powered by [Geocortex](#)

Data Distributor

Choose the layers from which you would like to extract data:

Extractable Feature Layers:

- ☒ Counties
- ☐ Mile Markers
- ☐ Rivers and Streams Generalized
- ☐ State and Federal Roads
- ☐ Surface Aquifers

Extractable Image Layers:

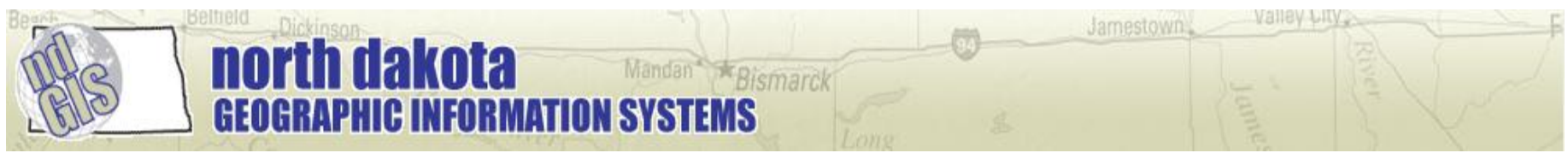
- ☐ Statewide 2003 Color 1meter Photos

[Clear Selections](#)

[Cancel](#) [< Back](#) [Next >](#)

Goals

- ✚ Training – offer instructor-led ESRI training & workshops
- ✚ Support of Dept. of Emergency Services' emergency services datasets project
- ✚ Support for Imagery for the Nation



Imagery For The Nation

- ✿ Annual 1-meter imagery paid by feds
- ✿ Buy-up options (higher resolution, color infrared, footprints, etc.) – as stated by state GI councils
- ✿ Partners:
 - USDA - Annual NAIP for entire country except HI & AK (3 years, 5 years, respectively)
 - USGS – 50% match: 6" for cities > 50k population
- ✿ For more information see <http://www.nsgic.org/hottopics/imageryforthenation.cfm>

Goals

- ❖ Upgrade infrastructure – ArcIMS, ArcGIS Server, interactive mapping improvements, data workflow
- ❖ Data – update existing, add new
- ❖ Investigate possible replacement to Metadata Explorer
- ❖ 2009-2011 budget

Goals

- ✿ 2009 NDGIS Users Conference
 - ❏ Still thinking of making it every two years
 - ❏ Allow GISTC to focus more on the Hub
 - ❏ Conference planners have been contacted
 - ❏ Some discussions with universities and colleges – could mean variable locations
 - ❏ Conference has been growing



GIS Users Conference

- ✚ Started out as GIS Day, transitioned to Users Conference in 2005
- ✚ Registered attendance levels:
 - ✚ 2001: 40+
 - ✚ 2002: 100
 - ✚ 2003: 120
 - ✚ 2004: 95
 - ✚ 2005: 119
 - ✚ 2006: 146
 - ✚ 2007: 182



Lightning Reports

Lightning Reports

- ❖ Red River Basin LiDAR project – Chuck Fritz, International Water Institute
- ❖ Emergency Services Datasets – Bob Nutsch, Information Technology Report (filling in for Greg Wilz, Department of Emergency Services)
- ❖ NAIP and Common Land Units – Dan Janes, ND FSA State Office



Red River Basin LiDAR



Emergency Services Datasets

Emergency Services Datasets

- ❖ Replaces the “road centerline project”
- ❖ Road centerlines, address points, and imagery
- ❖ Project champion: Department of Emergency Services (DES)
- ❖ Supporting resolutions from the GISTC and the ND 9-1-1 Association
- ❖ Number one priority on the SITAC (State Information Technology Advisory Committee) ranking of large projects

Emergency Services Datasets

SITAC Large Project Prioritization Results August 26, 2008

| Rank | Project Scores |
|-------------|---|
| | General Fund |
| 1 | Adjutant General - State wide seamless map |
| 2 | Adjutant General - CAD (Computer Aided Dispatch) |
| 3 | Adjutant General - Additional State Radio towers |
| 4 | ITD - Longitudinal Data System |
| 5 | DHS - Replace Eligibility Determination System |
| 6 | SOS - ND Business Development Engine |

Emergency Services Datasets

- ⊕ Centerlines and address points are derived from imagery
- ⊕ High-resolution imagery (1-foot) made possible through partnership with the NDDOT
- ⊕ DES exploring additional partnerships with federal agencies
- ⊕ Leveraging the NDDOT assets to collect imagery; most processing outsourced
- ⊕ Short-term maintenance with GPS
- ⊕ Long-term maintenance with new imagery

Emergency Services Datasets

- Department of Emergency Services is working to ensure this general funded request is in the Governor's budget for submission to the legislature
- If Ballot Measures #1 and #2 pass, this project likely will not move forward
- More information at <http://www.nd.gov/gis/news/emservicesdata.html>



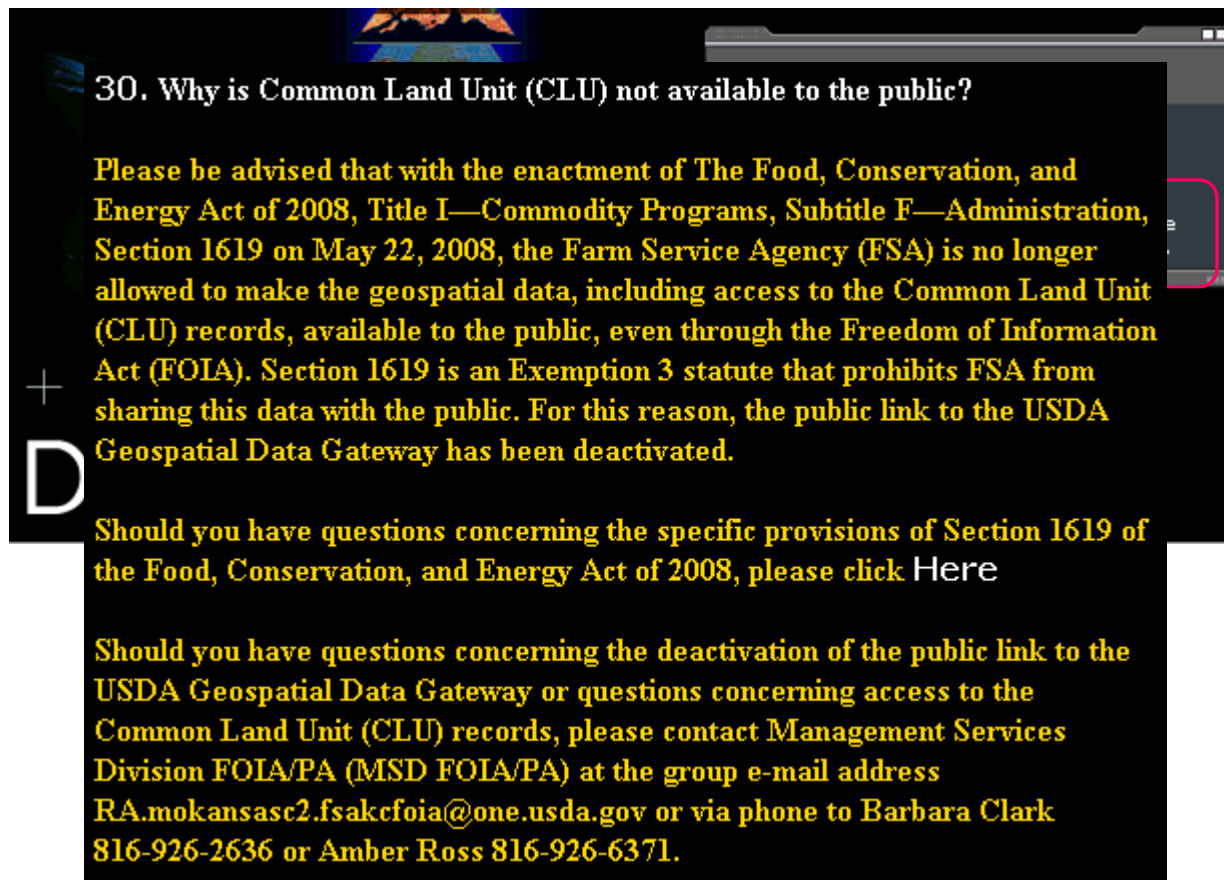
NAIP & Common Land Units



Feedback & Discussion

Feedback & Discussion – CLUs

Support for bringing back CLUs for public distribution?



30. Why is Common Land Unit (CLU) not available to the public?

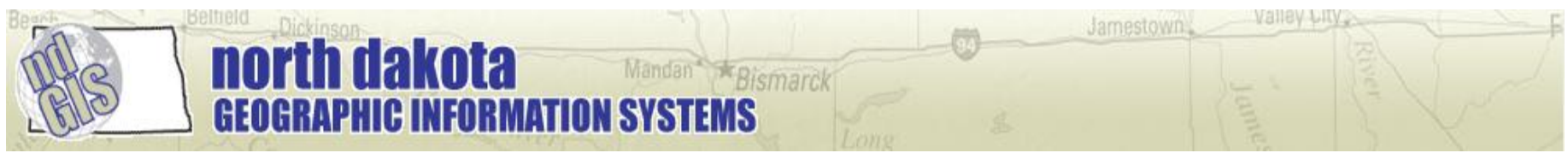
Please be advised that with the enactment of The Food, Conservation, and Energy Act of 2008, Title I—Commodity Programs, Subtitle F—Administration, Section 1619 on May 22, 2008, the Farm Service Agency (FSA) is no longer allowed to make the geospatial data, including access to the Common Land Unit (CLU) records, available to the public, even through the Freedom of Information Act (FOIA). Section 1619 is an Exemption 3 statute that prohibits FSA from sharing this data with the public. For this reason, the public link to the USDA Geospatial Data Gateway has been deactivated.

Should you have questions concerning the specific provisions of Section 1619 of the Food, Conservation, and Energy Act of 2008, please click [Here](#)

Should you have questions concerning the deactivation of the public link to the USDA Geospatial Data Gateway or questions concerning access to the Common Land Unit (CLU) records, please contact Management Services Division FOIA/PA (MSD FOIA/PA) at the group e-mail address RA.mokansasc2.fsakcfoia@one.usda.gov or via phone to Barbara Clark 816-926-2636 or Amber Ross 816-926-6371.

Feedback & Discussion – Other

- ✚ State-wide data priorities?
- ✚ Other state-wide needs?
- ✚ Training needs?
- ✚ Other needs?
- ✚ Questions?
- ✚ Comments?
- ✚ Ways to improve?



Thank You!

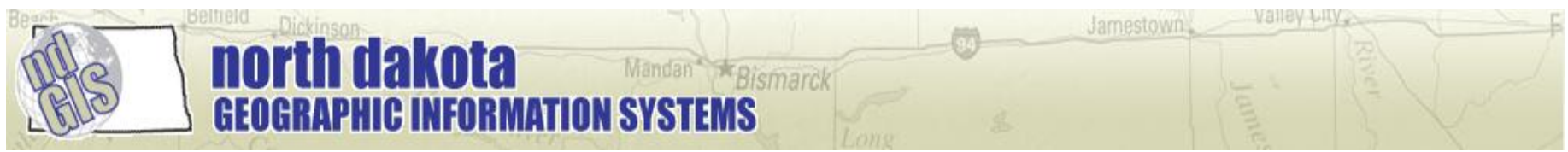
For more information, please contact:

Bob Nutsch, GIS Coordinator

701-328-3212

bnutsch@nd.gov

www.nd.gov/gis



Pictometry Presentation